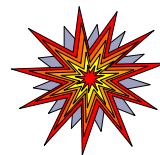


NSLS ES&H HIGHLIGHTS



Editor: W. Robert Casey

No. 43

Date: November 15, 2006

NSLS Interlock and Shielding Requirements: A Lesson-learned from a Recent NSLS Non-conformance



Do these labels look familiar to you and do you understand what they mean?

Radiation dose to NSLS staff, users and visitors is very low despite use of very high intensity beams that can cause significant radiation exposure in a very short time. Prevention of exposure to these high intensity beams is provided by the personnel protection interlock systems, the beam pipes, the hutches, and the Bremsstrahlung and scatter radiation shields installed along each beam line.

Rigorous control of the configuration of these systems is vital to our program for prevention of radiation exposure to personnel working on the experimental floor. Everyone is responsible to help assure that these systems are not disturbed without the required permits and involvement of the Operations Coordinator.

We experienced a situation this year where personnel did not follow the proper process for removing radiation shields at a beam line. Removal of these shields requires that a Safety System Authorization Work Permit be issued and posted at the beam line where the work is to be done. **No work is authorized to start** until the permit is approved, the beamline or accelerator is locked out, and the permit is posted at the work site. It is the responsibility of the worker to ensure that this permit is posted prior to removal of any shielding. Always contact an Operation Coordinator or a member of the ESH Staff if you have questions about the removal of shielding. Shielding is posted with the first label shown above.

The same is true for NSLS personnel protection interlock systems. Any work on components of these systems must be done either by the Interlock Group, or under the supervision of the Interlock Group. Entry to junction boxes or electronic chassis that are part of the interlock system by anyone other than a member of the Interlock Group is **prohibited**. These boxes are identified with the second label shown above. If you find you need to get into such a box, you must contact the the Operations Coordinator who will help determine how to proceed and assure that the Interlock Group and ESH staff are involved as needed.

If you have any questions or comments, please contact Andrew Ackerman, John Aloï, or Nick Gmür.